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QUIZZES

Practice test-1(Carboxylic Acids)



10 Questions



7 min

Topics

Nomenclature, Classification and Physical Properties of Carboxylic Acids, Preparations and Reactivity of carboxylic acids

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 58



1/10



7 min



Hint

Q : Which of the following is not a fatty acid:

A

Formic acid

B

Palmitic acid

C

Stearic acid

D

All are fatty acids

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

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6

7

06 : 56



2/10



7 min



Hint

Q : Which of the following is most acidic in nature:

A

Fluoroacetic acid

B

Nitroacetic acid

C

Acetic acid

D

Aminoacetic acid

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

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06 : 54



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3/10



7 min



Hint

Q : Which of the following is a cyclic carboxylic acid:

A

Phthalic acid

B

Oxalic acid

C

Lactic acid

D

Succinic acid

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 52



4/10



7 min



Hint

Q : Butyric acid was first isolated from

A

Butter

B

Vinegar

C

Milk

D

Red ant

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

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3

4

5

6

7

06 : 49



5/10



7 min



Hint

Q : Even carbon carboxylic acids have ____ melting point than the next lower and higher members having odd carbon atoms.

A

Higher

B

Lower

C

Equal

D

none of these

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 46



6/10



7 min



Hint

Q : 2-Butene when heated with alkaline KMnO_4 gives

A

Glycol

B

Glyoxal

C

Carboxylic acid

D

Ester

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 44



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7/10



7 min



Hint

Q : Glacial acetic acid freezes to ice like solid at

A

8°C

B

25°C

C

39°C

D

17°C

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 41



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8/10



7 min



Hint

Q : Which one is aliphatic dicarboxylic acid

A

Ethanoic acid

B

Oxalic acid

C

Benzoic acid

D

Phthalic acid

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 39



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9/10



7 min



Hint

Q : Phthalic acid is also called

A

Benzoic acid

B

1, 2-benzenedicarboxylic acid

C

1, 3-benzenedicarboxylic acid

D

1, 4-benzenedicarboxylic acid

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

Q : The boiling points of carboxylic acids are _____ than their corresponding alkanes.

- ☐ Low due to low molecular masses
- ☒ High due to hydrogen bonding
- ☐ High due to high molecular masses
- ☐ Low due to weak intermolecular forces

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SAEED MDCAT TEAM

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QUIZ RESULT

Practice test-1(Carboxylic Acids)



Time



Time



0/10

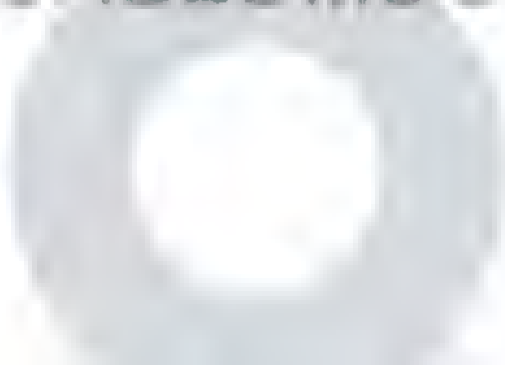
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SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT





correct

1/10

Q : Which of the following is not a fatty acid:



Formic acid



Palmitic acid



Stearic acid



All are fatty acids

Explanation

Aliphatic mono-carboxylic acid and fatty acid.



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Correct



Question



Incorrect



2/10

Q : Which of the following is most acidic in nature:



Fluoroacetic acid



Nitroacetic acid



Acetic acid



Am noacetic acid

Explanation

Electron withdrawing group increases acidic character of carboxylic acid



SAEEDMDCAT



correct



3/10

Q : Which of the following is a cyclic carboxylic acid:



Phthalic acid



Oxalic acid



Lactic acid



Succinic acid

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



correct



4/10

Q : Butyric acid was first isolated from



Butter



Vinegar



Milk



Red ant

Explanation

SAEEDMDCAT TEAM

book information



SAEEDMDCAT



Correct



Unattempted



Incorrect



5/10

Q : Even carbon carboxylic acids have ____ melting point than the next lower and higher members having odd carbon atoms.



Higher



Lower



Equal



none of these

Explanation

SAEED MDCAT TEAM

Even carbon carboxylic acid are converted into cyclic form.



Correct



Unattempted



Incorrect



6/10

Q : 2 Butene when heated with alkaline KMnO_4 gives



Glycol



Glyoxal



Carboxylic acid



Ester

Explanation

oxidative cleavage reaction



SAEEDMDCAT



correct

7/10

Q : Glacial acetic acid freezes to ice like solid at



8°C



25°C



39°C



17°C

Explanation

SAEED MDCAT TEAM

book information



SAEEDMDCAT



correct



8/10

Q : Which one is aliphatic dicarboxylic acid



Ethanoic acid



Oxalic acid



Benzoic acid



Phthalic acid

Explanation

SAEED MDCAT TEAM

book information



SAEEDMDCAT



Correct



Unanswered



Incorrect



9/10

Q : Phthalic acid is also called



Benzoic acid



1, 2-benzenedicarboxylic acid



1, 3-benzenedicarboxylic acid



1, 4-benzenedicarboxylic acid

Explanation

IUPAC name



SAEEDMDCAT



Correct



Unattempted



Incorrect



10/10

Q : The boiling points of carboxylic acids are _____ than their corresponding alkanes.



Low due to low molecular masses



High due to hydrogen bonding



High due to high molecular masses



Low due to weak intermolecular forces

Explanation

SAEED MDCAT TEAM

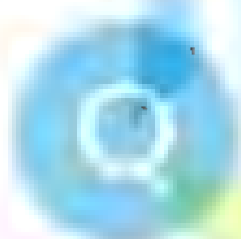
polar hydroxyl group causes hydrogen bonding



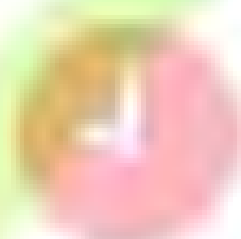
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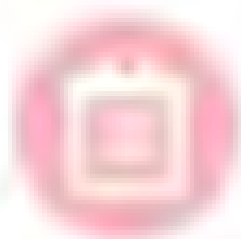
Practice test-2 (Carboxylic Acids)



00



1 hr 15 min



01-May-2021



11:00 AM

SAEED MDCAT

SAEED MDCAT TEAM

07/10/2020

11:00 AM



SAEEDMDCAT

Q : Which of the following compound will convert acetic acid to acetyl chloride:

- ☐ NaCl
- ☐ HCl
- ☐ ZnCl_2
- ☐ SOCl_2

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : Acetic acid undergoes reduction with LiAlH_4 to give:

- ☒ Ethanol
- ☐ Methanol
- ☐ Ethane
- ☐ Methane

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : Ammonium acetate on strong heating gives

- ☒ Ammonium carbamate
- ☐ Acetamide
- ☐ Urea
- ☐ Ammonia

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : The dehydration of the carboxylic acids in the presence of P_2O_5 and strong heating yields

- ☒ Ester
- ☐ Ether
- ☐ anhydride
- ☐ ketone

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : Which reagent is used to reduce a carboxylic acid to an alkane?

☐ H_2 / Ni

☐ HI / P

☐ NaBH_4

☐ LiAlH_4

SAEED MDCAT

SAEED MDCAT TEAM

 SAEEDMDCAT

Q : An aqueous solution of an organic compound reacts with Na_2CO_3 to produce CO_2 gas. The organic compound is

- ☐ $\text{CH}_2 = \text{CH} - \text{CH}_3$
- ☒ CH_3CHO
- ☐ $\text{CH}_3\text{COOC}_2\text{H}_5$
- ☐ $\text{CH}_3 - \text{CH}_2 - \text{COOH}$

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT



Q : Acetamide is prepared by

- ☐ Heating $\text{CH}_3\text{COONH}_4$
- ☐ heating CH_3CN
- ☐ heating $\text{CH}_3\text{COOC}_2\text{H}_5$
- ☐ hydrolysis of CH_3CN

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : 2-Hydroxylpropanoic acid is called___and 2,3-Dihydroxybutandioic acid is called___.

- ☐ Oxalic acid, Maleic acid
- ☐ lactic acid, tartaric acid
- ☐ citric acid, aspartic acid
- ☐ None of these

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q : The reactivity of carboxylic acids is due to the presence of ____group.

- ☐ Carbonyl group
- ☐ hydroxyl group
- ☐ ester group
- ☐ Both A and B

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT



Q : Organic compounds X and Y react to form organic compound Z. what type of compounds can X, Y and Z be?

☐ X Y Z
Alcohol ester acid

☐ X Y Z
Acid ester alcohol

☐ X Y Z
Ester alcohol acid

☐ X Y Z
Alcohol acid ester

SAEED MDCAT

SAEED MDCAT TEAM

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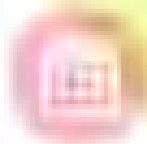


QUIZ RESULT

Practice test-2(Carboxylic Acids)



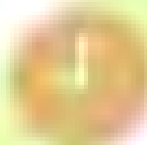
10



10 min



0/10



10 min



0%



0%

SAEEDMDCAT TEAM



SAEEDMDCAT





correct



1/10

Q : Which of the following compound will convert acetic acid to acetyl chloride



NaCl



HCl



ZnCl₂



SOCl₂

Explanation

SAEED MDCAT TEAM

Thionyl chloride can replace OH group with Cl



SAEEDMDCAT



Correct



Question



Incorrect



2/10

Q : Acetic acid undergoes reduction with LiAlH_4 to give



Ethanol



Methanol



Ethane



Methane

Explanation

SAEED MDCAT TEAM

Partial reduction of acetic acid gives ethanol



SAEEDMDCAT



Correct



Incorrect



Incorrect



3/10

Q : Ammonium acetate on strong heating gives



Ammonium carbamate



Acetamide



Urea



Ammonia

Explanation

Acetamide cannot be prepared directly



SAEEDMDCAT



Correct



Incorrect



Incorrect



4/10

Q : The dehydration of the carboxylic acids in the presence of P_2O_5 and strong heating yields



Ester



Ether



anhydr de



ketone

Explanation

SAEED MDCAT TEAM

dehydration takes place with P_2O_5



SAEEDMDCAT



correct



5/10

Q : Which reagent is used to reduce a carboxylic acid to an alkane?



H_2 / Ni



HI / P



$NaBH_4$



$LiAlH_4$

Explanation

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$LiAlH_4$ is the reducing agent which is used to converted carboxylic acid into alcohol.

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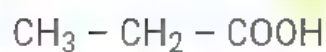
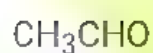


correct



6/10

Q : An aqueous solution of an organic compound reacts with Na_2CO_3 to produce CO_2 gas. The organic compound is



Explanation

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Decarboxylation process.



SAEEDMDCAT



correct



7/10

Q : Acetamide is prepared by



Heating $\text{CH}_3\text{COONH}_4$



heating CH_3CN



heating $\text{CH}_3\text{COOC}_2\text{H}_5$



hydrolysis of CH_3CN

Explanation

SAEED MDCAT TEAM



SAEEDMDCAT



correct



8/10

Q : 2 Hydroxylpropanoic acid is called___and 2,3 Dihydroxybutandioic acid is called___.



Oxalic acid, Maleic acid



lactic acid, tartaric acid



citric acid, aspartic acid



None of these

Explanation

SAEED MDCAT TEAM

IUPAC names



SAEEDMDCAT



correct



9/10

Q : The reactivity of carboxylic acids is due to the presence of ____group



Carbonyl group



hydroxyl group



ester group



Both A and B

Explanation

SAEED MDCAT TEAM

both groups give corresponding reactions



SAEEDMDCAT



Correct

:

Unattempted



Incorrect



10/10

Q : Organic compounds X and Y react to form organic compound Z. what type of compounds can X, Y and Z be?



X

Y

Z

Alcohol

ester

acid



X

Y

Z

Acid

ester

alcohol



X

Y

Z

Ester

alcohol

acid



X

Y

Z

Alcohol

acid

ester

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Explanation



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Esterification

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QUIZZES

Practice test-1(Macromolecules)

10 Questions

1 Hour

Options

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

Q:

In formation of protein, carboxylic group of one amino acid and amino

group of other amino acid condensed together to give:

Peptide linkage

Ester linkage

1 → 6 glycosidic linkage

β 1-4 Glycosidic linkage

SAEEDMDCAT

Q:

The three dimensional twisting and folding of polypeptide chain results in:

Primary structure

Secondary structure

Tertiary structure

Quaternary structure

SAEED MDCAT TEAM

SAEEDMDCAT

Q:

Which of following is / are examples of simple protein.

- ☐ Polypeptide
- ☐ Collagen and albumin
- ☐ Phospo proteins
- ☐ Peptones

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q:

The secondary structure of protein is maintained by H-bonding between

N and H

O and H

O and C

C and H

SAEED MD CAT TEAM

SAEEDMDCAT

Q:

The molecular weight of protein is

☐ > 1000 amu.) < 1000 amu.

☐ < 1000 amu.

☐ > 10000 amu.

☐ < 10000 amu.

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q:

Which enzyme is used to catalyze the addition of ammonia, water or carbon dioxide to double bond

Phospho-transferase

Phospho-glyceromutases

Fumarase

Succinic thiokinase

SAEED MD CAT TEAM

SAEEDMDCAT

Q:

Many enzymes contain a protein part and non protein part. This protein part is_____

☐ Apoenzyme

☒ Holoenzyme

☐ Co-factor

☐ Co-enzyme

SAEED MDCAT

SAEED MDCAT TEAM

SAEEDMDCAT

Q:

Which statement is incorrect

Enzymes are stereo specific

Enzymes are highly specific

Enzymes can be crystallized

Enzyme can resist the radiation

SAEED MDCAT TEAM

SAEEDMDCAT



Q:

Indicate the enzyme which catalyses the following reaction

Zymase

Invertase

Urease

Diastase

Q:

The formation of $\text{SO}_3(\text{g})$ from $\text{SO}_2(\text{g})$ and $\text{O}_2(\text{g})$ in the lead chamber process for the manufacture

of sulphuric acid is the example of

Homogeneous catalysis

Heterogeneous catalysis

Auto catalyzes

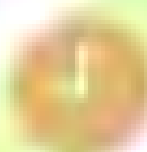
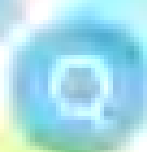
Negative catalyses

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QUIZ RESULT

Practice test-1(Macromolecules)



Time



Score



C/10

0%

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



Q:

In formation of protein, carboxylic group of one amino acid and amino

group of other amino acid condensed together to give:

Peptide linkage

Ester linkage

1 → 6 glycosidic linkage

β 1-4 Glycosidic linkage

SAEED MDCAT
SAEED MDCAT TEAM

Explanation

SAEEDMDCAT

Peptide linkage formed by the combination of carboxylic acid and amino group

Q:

The three dimensional twisting and folding of polypeptide chain results in:

- ☐ Primary structure
- ☐ Secondary structure
- ☒ Tertiary structure
- ☐ Quaternary structure

SAEED MDCAT
SAEED MDCAT TEAM

Explanation
SAEEDMDCAT

The three dimensional twisting and folding of polypeptide chain results in tertiary structure



correct



3/10

Q:

Which of following is / are examples of simple protein.



Polypeptide



Collagen and albumin



Phospo proteins



Peptones

Explanation

SAEED MDCAT TEAM



SAEEDMDCAT

Albumins globulins legumin and collagen are examples of simple proteins

Q:

The secondary structure of protein is maintained by H-bonding between

N and H

☒ O and H

☐ O and C

☐ C and H

SAEED MDCAT
SAEED MDCAT TEAM

Explanation

SAEEDMDCAT

Hydrogen bonding exist between O atom and H atom in secondary proteins

Q:

The molecular weight of protein is

☐ > 1000 amu.) < 1000 amu.

☐ < 1000 amu.

☒ > 10000 amu.

☐ < 10000 amu.

SAEED MDCAT

SAEED MDCAT TEAM



Explanation

SAEEDMDCAT

The molecular weight of protein is greater than 10000 amu

Q:

Which enzyme is used to catalyze the addition of ammonia, water or carbon dioxide to double bond

Phospho-transferase

Phospho-glyceromutases

Fumarase

Succinic thiokinase

SAEED MDCAT TEAM

Explanation

Phospho-glyceromutases is used to catalyze the addition of



Practice test-1(Macromolecules)



Incorrect



7/10

Q:

Many enzymes contain a protein part and non protein part. This protein part is_____

A

Apoenzyme

B

Holoenzyme

C

Co-factor

D

Co-enzyme



Explanation

protein part of enzyme is apoenzyme

1

2

3

4

5

6

7



Practice test-1(Macromolecules)



Incorrect



8/10

Q:

Which statement is incorrect

A

Enzymes are stereo specific

B

Enzymes are highly specific

C

Enzymes can be crystallized

D

Enzyme can resist the radiation



Explanation

Enzyme can denature by radiation.

3

4

5

6

7

8

9



Practice test-1(Macromolecules)

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Q:

Indicate the enzyme which catalyses the following reaction

A

Zymase

B

Invertase

C

Urease

D

Diastase



Explanation

SAEEDMDCAT

The enzyme which act at urea is called Urease



Practice test-1(Macromolecules)

Q:

The formation of $\text{SO}_3(\text{g})$ from $\text{SO}_2(\text{g})$ and $\text{O}_2(\text{g})$ in the lead chamber process for the manufacture of sulphuric acid is the example of

A

Homogeneous catalysis

B

Heterogeneous catalysis

C

Auto catalyzes

D

Negative catalyses



SAEEDMDCAT

Explanation

It needs $\text{NO}(\text{g})$ as a catalyst. Both the reactants and the catalyst are gases.